

Calidad del agua. Medición de la actividad alfa y beta total en agua no salina. Método de deposición de una capa delgada. (ISO 10704:2019). (Ratificada por la Asociación Española de Normalización en mayo de 2019.)

UNE-EN ISO 10704:2019

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Water quality - Gross alpha and gross beta activity - Test method using thin source deposit (ISO 10704:2019) (Endorsed by Asociación Española de Normalización in May of 2019.)

Qualité de l'eau - Activités alpha globale et bêta globale - Méthode d'essai par dépôt d'une source fine (ISO 10704:2019) (Entérinée par l'Asociación Española de Normalización en mai 2019.)

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EUROPEAN STANDARD

EN ISO 10704

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2019

ICS 13.060.60; 13.280

Supersedes EN ISO 10704:2015

English Version

Water quality - Gross alpha and gross beta activity - Test method using thin source deposit (ISO 10704:2019)

Qualité de l'eau - Activités alpha globale et bêta globale
- Méthode d'essai par dépôt d'une source fine (ISO
10704:2019)

Wasserbeschaffenheit - Bestimmung der Gesamt-
Alpha- und der Gesamt-Beta-Aktivität in nicht-
salzhaltigem Wasser - Dünnschichtverfahren (ISO
10704:2019)

This European Standard was approved by CEN on 16 February 2019.

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European foreword

This document (EN ISO 10704:2019) has been prepared by Technical Committee ISO/TC 147 "Water quality" in collaboration with Technical Committee CEN/TC 230 "Water analysis" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.

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This document supersedes EN ISO 10704:2015.

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Endorsement notice

The text of ISO 10704:2019 has been approved by CEN as EN ISO 10704:2019 without any modification.

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Foreword

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This document was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 3, *Radioactivity measurements*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This second edition cancels and replaces the first edition (ISO 10704:2009), which has been technically revised. The main changes compared to the previous edition are as follows:

- Introduction: an introduction has been added;
- [Clause 1](#): the scope has been modified to specify applicability to emergency situations and applicability of waste water as a test sample; information about the exclusion of low energy beta emitters has also been added;
- [Clause 4](#): the filtration has been specified to be carried out at 0,45 µ;
- [5.1.2.2](#): ¹³⁷Cs has been introduced as a standard that can be used;
- [5.2.4](#): the recommended thickness has been increased to up to 400 µg/cm²;
- [7.6.3.1](#): in order to evaluate self-absorption phenomena, spiking method has been recommended to mimic the nature of the salt;
- [Clause 8](#):
 - a new [Formula \(9\)](#) has been introduced to obtain the beta activity concentration when systematic correction is not required;
 - the subsequent Formulae have been renumbered;
- [Clause 9](#): several limitations and interferences have been given;
- [9.1](#): the natural radionuclides contributions have been given.